

IFW16

DATE: 08/27/2004 TIME: 10:15:26

PATENT APPLICATION: US/09/390,846

Input Set : N:\Crf3\RULE60\09390846.raw Output Set: N:\CRF4\08272004\I390846.raw

SEQUENCE LISTING

```
(1) GENERAL INFORMATION:
             (i) APPLICANT: Kok, Jacobus Johannes
      6
      7
                             van den Boogaart, Paul
                             Vermeulen, Arnoldus Nicolaas
      8
            (ii) TITLE OF INVENTION: Coccidiosis poultry vaccine
     11
           (iii) NUMBER OF SEQUENCES: 2
     14
            (iv) CORRESPONDENCE ADDRESS:
     17
                   (A) ADDRESSEE: Akzo Nobel Patent Department
     18
                   (B) STREET: 1300 Piccard Drive, Suite 2067
     19
                   (C) CITY: Rockville
     20
                   (D) STATE: Maryland
     21
                   (E) COUNTRY: USA
     22
     23
                   (F) ZIP: 20850
             (v) COMPUTER READABLE FORM:
     26
                   (A) MEDIUM TYPE: Floppy disk
     27
                   (B) COMPUTER: IBM PC compatible
     28
                   (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     29
                   (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
     3.0
            (vi) CURRENT APPLICATION DATA:
     33
                   (A) APPLICATION NUMBER: US/09/390,846
C--> 34
C--> 35
                   (B) FILING DATE: 14-Sep-1999
                   (C) CLASSIFICATION:
     36
           (vii) PRIOR APPLICATION DATA:
     38
     39
                   (A) APPLICATION NUMBER: US/08/676,882
                   (B) FILING DATE: 03-JUL-1996
     40
          (viii) ATTORNEY/AGENT INFORMATION:
     42
     43
                   (A) NAME: Gormley, Mary E.
                   (B) REGISTRATION NUMBER: 34,409
     44
     47
            (ix) TELECOMMUNICATION INFORMATION:
                   (A) TELEPHONE: (301) 258-5200
     48
                   (B) TELEFAX: (301) 977-0847
     49
        (2) INFORMATION FOR SEQ ID NO: 1:
     55
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 1679 base pairs
     56
                   (B) TYPE: nucleic acid
     57
     58
                   (C) STRANDEDNESS: double
                   (D) TOPOLOGY: linear
     59
            (ii) MOLECULE TYPE: cDNA to mRNA
     62
           (iii) HYPOTHETICAL: NO
     65
            (iv) ANTI-SENSE: NO
     68
            (vi) ORIGINAL SOURCE:
     71
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(A) ORGANISM: Eimeria acervulina

72

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77	(B) CLONE: EASC2_1 (ix) FEATURE:																
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102			D) 0'					:/lak	oel=	Ecol	RI-1:	inker	r				
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112	(x	i) SE	QUEN	CE DE	ESCRI	PTI	ON: S	SEQ :	D NO): 1	:						
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117	TTTTTT	TTCT	ACAC	ATTA	A TA	rtct'	rcgt:	TAC	CGTT	TTAT	TTG	CTAC	AAA :	raaa(CCCCTT		120
	AAACTC																180
	TACAGO																240
126	TATCTI	TCTT	CTTC'	TTTT	TT CT	rtgc:	rctt'	r cr	rgtg <i>i</i>						_		294
127										ľ		Ala V	Val 1	Phe (
128											. 1				5		
	AAG AA																342
	Lys As	n Thr	Arg		Lys	He	Ala	Met		GLY	Ser	GLY	Met		GIY		
133	~~~	~	a am	10	ama.	maa	7.00	mma	15	C1 70 70	CITIC C	~~~	CI N ITT	20	ama		200
	GGC AC																390
	Gly Th	r Met		Pne	ьеи	Cys	ser		Arg	GIU	Leu	GIY		vai	vai		
138	ama mr	a ana	25	CITI N	aaa	7 7 7	70 000	30	N THICH	aaa	777	acc	35	CAT	אידי א		438
	CTC TT																430
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143	maa aa	40	шаа	шаа	ama	cmm	45	7 00	CCI	א יודי א	<u>አ</u> ርአ	50	TI A C	ccc	ጥርአ		486
	TCG CA																400
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148	AAT TO	5 א יייארי	CVC	ጥሮሮ	ጥጥር		CCT	acc	CNC	GTA		∆ידי∆	מידמ	ΔCD	GCA		534
	Asn Se																J J 4
152	70	т туг	GIU	Суы	75	пур	СТА	AT d.	rap	80	VUI	-1 C	.		85		
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	Gly Il																J J L
13/	GTA TI	C 1111	⊔у⋦	116	FIO	GIA	пур	DCT	voh	T) A IS	υıu	11 P	DCT	1119			

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1 5 0					90					95					100		
158	CAT	CTA	עייייט	ССТ		አአጥ	א ידי א	λλG	מיד מ		ΔCC	GAG	GTC	GGT	GCA	GCA	630
															Ala		
163	лэр	пси	neu	105	vai	rioii	110	шую	110	1100	111-9	010	val	115			
	בידים	ΔΔΔ	тст		тст	ССТ	таа	GCA		GTT	ATT	ААТ	ATA		AAT	CCT	678
															Asn		
168	110	Lyb	120	-1-		110		125					130				
	TTA	GAT		ATG	GTA	GCT	GCT		CAA	GAG	TCA	TCA	GGA	CTA	CCT	CAT	726
															Pro		
173		135					140				•	145					
	CAT		ATC	TGC	GGT	ATG	GCT	GGG	ATG	CTT	GAT	AGC	TCT	CGT	TTT	AGA	774
															Phe		
	150			4	-	155		•			160					165	
181	CGT	ATG	ATA	GCT	GAT	AAA	TTA	GAA	GTC	TCT	CCT	AGA	GAT	GTA	CAG	GGG	822
															Gln		
183					170					175					180		
186	ATG	GTC	ATA	GGT	GTA	CAC	GGC	GAT	CAT	ATG	GTG	CCC	CTA	AGT	AGA	TAT	870
187	Met	Val	Ile	Gly	Val	His	Gly	Asp	His	Met	Val	Pro	Leu	Ser	Arg	Tyr	
188			,	185					190					195			
															GGC		918
192	Ala	Thr	Val	Asn	Gly	Ile	Pro	Leu	Ser	Glu	Phe	Val	Lys	Lys	Gly	${\tt Trp}$	
193			200					205					210				
															GTC		966
197	Ile	Lys	Gln	Glu	Glu	Val	Asp	Asp	Ile	Val	Gln	Lys	Thr	Lys	Val	Ala	
198		215					220					225					
															TAT	-	1014
202	Gly	Gly	Glu	Ile	Val	Arg	Leu	Leu	Gly	Gln	_	Ser	Ala	Tyr	Tyr		
	230					235					240					245	
															GAT		1062
	Pro	Gly	Ala	Ser		Ile	GIn	Met	Ala		Ser	'l'yr	Leu	Lys	Asp	Arg	
208		_ ~ _			250	maa		maa		255	C7 7	· .	(13 B	m v m	260	CIED N	1110
															GGT		1110
	Lys	Arg	Val		Val	Cys	Ser	Cys		ьеи	GIN	GIĀ	GIII		Gly	val	•
213	a . a		G7 G	265	mma	GG T	CITI N	COM	270	amm	7 m.c	aam	aaa	275	CCIT	CITIT	1158
															GGT		. 1130
	GIN	ASI		туг	ьeu	GIY	Val	285	Cys	vai	rre	GIY	290	Arg	Gly	vai	
218	C17.C	7 7 7	280	ידיידי א	CAC	τιτι λ	CAA		አ C C	CCA	CNN	GNN	-	CAG	GAG	ሮሞሞ	1206
															Glu		1200
223	Giu	295		116	Giu	шец		шеα				305	ni 9	0111	014	шеш	
	CAC			ΔТС	САТ	GAG							GCT	בידת	GCT	GCT	1254
															Ala		
	310	Ory	DCI	110	иор	315	vul	шуы	Ora	1100	320	270				325	
		САТ	GCA	ፐርር	AAG		CAG	CAG	CAAA	ATCG		AAGT'	TGCA	G CG	CTAG	AACA	1309
					Lys											,	_
233	Lou	11.25			330												
	ACC	AGCA	GCA (GCAG		AG C	AGCC'	TATA	G TT	CTTG	CTGC	TGC'	TGTT	CCT .	ACTA	CAGCTG	1369
																CAGCAG	
																ACTTGC	
			_			_			-								

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248 251	CGAT	CCCA CACTO	ATC G	SATCO	CCAGC	CA AC	CTCCA	ACGGG	GCI	CTTA	ACT	GTTA	AACC	TA T	TTATT	ACTGT CTTAT GGGGGC	1549 1609 1669 1679
	CCGGTACCCA (2) INFORMATION FOR SEQ ID NO: 2:															10/9	
257	(2)																
260		(i)	SEÇ	-						_							
261				•		H: 33			acid	ls							
262			(E	3) TY	PE:	amir	no ac	cid									
263			([) T(POLC	OGY:	line	ear									
267		(ii)	MOI	ECUI	E T	YPE:	prot	ein									
271			SEÇ														
275	Met	Ala	Val	Phe	Glu	Lys	Asn	Thr	Arg	Pro	Lys	Ile	Ala	Met	Val	Gly	
276	1				5					10					15		
279	Ser	Gly	Met	Ile	Gly	Gly	Thr	Met	Ala	Phe	Leu	Cys	Ser	Leu	Arg	Glu	
280		_		20		-			25					30			
	Leu	Glv	Asp	Val	Val	Leu	Phe	Asp	Val	Val	Pro	Asn	Met	Pro	Met	Gly	
284		1	35					40					45				
	Lvs	Ala	Met		Ile	Ser	His	Asn	Ser	Ser	Val	Val	Asp	Thr	Gly	Ile	
288	-1-	50					55					60	-		-		
	Thr		Tyr	Glv	Ser	Asn		Tvr	Glu	Cvs	Leu	Lvs	Glv	Ala	Asp	Val	
292	65	Val	1 y 1.	O T Y	001	70		-1-		-1-	75	-1	1		_	80	
		т1Д	Ile	Thr	Δla		Tle	Thr	Lvs	Tle		Glv	Lvs	Ser	Asp	Lvs	
296	vaı	116	110	1111	85	OI y	110			90	110		-1-		95	_1	٠
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304	7. ~ ~	тТо	Thr	7 an	Dro	T 011	7) an					Δla		Gln	Glu	Ser	
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309	0	130	Leu	Dro	II i a	цiс		Tlo	Ctrc	Clv	Mot		Glv	Met	T.011	Δsn	
		GIÀ	ьeu	PIO	пть		Arg	116	СуБ	Gry	155	ΑΙα	СТУ	MCC	пси	160	
	145	a	7	Dl	7	150	Mot	т1.	7.7.	7 an		Toil	Clu	Val	Sor		
	ser	ser	Arg	Pne		Arg	мес	TTE	Ala		цуб	цец	Gru	vai	175	FIO	
319	_		77.7	a1	165	36 - 4	77-7	тЪо	c1	170	IIi a	C1	7 an	uic		Ua l	
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324	_	_	_	180	_		ml	**- 7	185	~ 1	т1.	Desc	Tail		C1.,	Dho	
	Pro	Leu	Ser	Arg	Tyr	Ala	Thr		Asn	GLY	11e	PIO		ser	GIU	Pile	
329	_		195		_		_	200	~ 7	~ 7	1		205	-1.	77-7	~1 m	
333	Val		Lys	Gly	Trp	Ile		GIn	Glu	GIU	vaı		Asp	тте	vai	GIII	
334		210					215		_	_		220			~ 7	~ T	
338	Lys	Thr	Lys	Val	Ala	Gly	Gly	Glu	Ile	Val		Leu	Leu	GIY	Gin		
	225					230					235	_				240	
343	Ser	Ala	Tyr	Tyr	Ala	Pro	Gly	Ala	Ser		Ile	Gln	Met	Ala		Ser	
344					245					250					255		
348	Tyr	Leu	Lys	Asp	Arg	Lys	Arg	Val	Met	Val	Cys	Ser	Cys		Leu	Gln	
349				260					265					270			
353	Gly	Gln	Tyr	Gly	Val	Gln	Asn	His	Tyr	Leu	Gly	Val	Pro	Cys	Val	Ile	
354			275					280					285				
3 57	Gly	Gly	Arg	Gly	Val	Glu	Lys	Ile	Ile	Glu	Leu	Glu	Leu	Thr	Ala	Gln	
358	-	290	_	-			295					300					

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362 Glu Arg Gln Glu Leu Gln Gly Ser Ile Asp Glu Val Lys Glu Met Gln 320 363 305 310

367 Lys Ala Ile Ala Ala Leu Asp Ala Ser Lys 325

VERIFICATION SUMMARY

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L:34 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:] L:35 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]